Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)	
)	
Inquiry Concerning Deployment of Advanced)	GN Docket No. 17-199
Telecommunications Capability to All Americans)	
In a Reasonable and Timely Fashion)	

Reply Comments of ADT Corporation

The ADT Corporation ("ADT") submits these Reply Comments in response to the Federal Communications Commission's Thirteenth Section 706 Report Notice of Inquiry. ADT's reply comments focus on the need to ensure deployment of mobile wireless broadband networks capable of supporting critical public safety applications, such as real-time video verification of alarms notifying authorities of a burglary, fire or other potentially life-threatening emergency.

ADT's primary concern is ensuring that mobile wireless broadband *upload* speeds are sufficient to timely and accurately transmit this critical information to alarm monitoring call centers so that appropriate action can be taken. Specifically, ADT respectfully urges the Commission not to conclude that the deployment of a mobile broadband wireless network capable of only 1 Mbps upstream satisfies Section 706's requirement of timely and reasonable deployment of advanced telecommunications capability ("ATC"). Upload speeds of 1 Mbps are

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¹ Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, Thirteenth Section 706 Report Notice of Inquiry, GN Docket No. 17-199, FCC 17-109 (rel. August 8, 2017) ("*NOI*").

woefully inadequate for real-time video surveillance that increasingly must utilize mobile wireless networks.

I. Background

ADT is the nation's largest provider of home and business automation and alarm monitoring services, serving more than seven million residential and commercial customers.

ADT offers a wide range of services including burglar alarm monitoring, fire and smoke monitoring, carbon monoxide monitoring, flood and temperature monitoring, panic buttons and video surveillance for residences. ADT also offers a suite of intrusion detection, access control systems and management, video surveillance and automated business control tools for businesses of all sizes. Nationwide, ADT operates six monitoring centers that provide 24/7 service and that notify local police, fire and emergency services when alarm data is received. ADT's customers depend on properly functioning alarm services, whether they are dealing with life safety threats resulting from an intrusion, a health crisis, a flood, carbon monoxide leaks or fires. Such services require reliable and immediate connections to professionally-staffed monitoring centers, and, in turn, public safety officials and first responders.

Several trends are affecting the ability of alarm monitoring companies to provide these services. One is the rapid transition from traditional wireline TDM-based copper connections to IP-based broadband networks or mobile wireless networks. This is a trend that ADT carefully monitors, and at times has spoken out against, as it has the potential to impact its customers and the services upon which they rely, given that some customer-owned equipment is not compatible with broadband or mobile wireless networks and must be upgraded at the time of the transition. The Commission too has recognized that the transition to broadband or wireless networks must

not impede the ability of consumers to continue to utilize "key applications" such as alarm monitoring.²

Another important trend is that real-time video surveillance is becoming an increasingly integral component of home and business alarm monitoring services. Video surveillance not only enhances the quality of monitoring services, it is becoming a necessity as more localities demand real-time video verification of an alarm event before dispatching emergency services. A number of cities, including Detroit, Las Vegas, Milwaukee and Salt Lake City, have adopted alarm verification ordinances that require visual confirmation, either in person (which can be inefficient and time consuming) or through surveillance video.³ Other cities have enacted policies that prioritize response to alarm signals when accompanied by video or in-person verification. To comply with these ordinances and help ensure the best use of first responder resources for customers, many alarm providers, including ADT, offer surveillance video cameras connected to the overall alarm system that are capable of providing access to live streaming video or capturing a video clip when motion is detected.

II. The Commission Should Not Conclude that Mobile Broadband with a 10 Mbps / 1 Mbps Speed Benchmark Constitutes Timely and Reasonable Deployment of Advanced Telecommunications Capability

As noted above, real-time video surveillance is becoming a critical component of ADT's alarm monitoring services. Often, video clips or real-time video must be uploaded over mobile wireless networks. As CTIA observed, consumers increasingly rely on wireless broadband for wide range of uses, including "home security services." Reliance on mobile wireless broadband occurs, for example, when an alarm customer's wireline connection goes down and a mobile

² In the Matter of Technology Transitions, Declaratory Ruling, Second Report and Order, and Order on Reconsideration, 31 FCC Rcd. 8283, 8342, ¶ 159 (2016) ("2016 Technology Transitions Order").

³ See http://www.siacinc.org/docs/STANDARDS/List%20AHJ%20Req.pdf

⁴ See Comments of CTIA, GN Docket No. 17-199, at 8 (filed September 21, 2017) ("CTIA Comments").

wireless connection is used as an emergency backup to send alarm monitoring information, including video, to ADT's Customer Monitoring Centers. ADT offers a wireless backup service called CellGuard® that utilizes the mobile cellular network in the event the customer's wireline connection is disrupted due to storms, accidents, fallen or cut lines, or other wireline provider outage issues. This service comes with backup power as well. Many ADT customers utilize this mobile wireless backup service. Additionally, in some cases mobile wireless networks may be the only communications option available to consumers in an area. Carriers retiring copper lines may only offer a wireless service as a substitute, leaving consumers that want the protection of an alarm monitoring service without a wireline option, either TDM or broadband.

An upload mobile wireless broadband speed benchmark of 1 Mbps would provide insufficient capacity for real-time video monitoring, potentially risking the safety or health of consumers or harm or destruction of their property. ADT thus urges the Commission to adopt a more robust mobile wireless benchmark to which wireless providers should aspire. In this regard, ADT agrees with CTIA that the Commission should optimally balance regulatory policies to encourage deployment of mobile broadband networks needed to support ever increasing and innovative "broadband-contingent" services. A mobile wireless upload benchmark of 1 Mbps is simply too low of a bar.

For that reason, and although ADT agrees that mobile wireless broadband deployment should be assessed, ADT would be very concerned with an approach that would find timely and reasonable broadband deployment in an area based solely on the presence of a mobile wireless broadband network, especially if that finding were predicated on a benchmark offering of only 1 Mbps upstream. Such a finding would potentially leave entire areas without sufficient capacity

⁵ See https://www.adt.com/resources/cellular-backup. CellGuard® is also offered as the primary or sole means of alarm monitoring.

⁶ CTIA Comments at 2.

to support any number of applications, including alarm monitoring services. ADT thus joins with those commenters expressing concerns that the Commission might find that advanced telecommunication capability is being deployed in a reasonable and timely fashion based solely on the presence of wireless broadband services in an area. ADT also concurs with commenters calling for a faster mobile wireless benchmark.

More fundamentally, ADT urges the Commission to provide additional emphasis on upload speeds when considering any benchmark. The availability of broadband too often is concerned solely with the speed with which consumers can download videos, social media feeds and other content. These are obviously important applications but upload capacity frequently implicates critical functions. This point is aptly made by groups representing the deaf, hard-of-hearing, or those with other disabilities who note that "many service offerings with generous download speeds come with significantly constrained upload speeds that inhibit the ability for deaf and hard-of-hearing users to engage in two-way video. Although a 10 Mbps/1Mbps wireless service may enable users to stream video or download online content simultaneously, a 1 Mbps upload speed is insufficient to enable simultaneous use of the same broadband connection for transmission of real-time conversational video content, particularly for VSR users."

Some commenters recommend adoption of wireless interface benchmark to defined ATC rather that a specific speed threshold. AT&T recommends using the LTE interface while

⁷ See, e.g., Comments of the City of New York, GN Docket No. 17-199, at 2 (filed September 21, 2017) ("City of New York Comments"); Comments of Deere & Company, GN Docket No. 17-199, at 2-3 (filed September 21, 2017); Comments of the Wireless Internet Service Providers Association, GN Docket No. 17-199, at 3 (filed September 21, 2017).

⁸ *See*, City of New York Comments at 2-3 (urging adoption of 25/3 Mbps benchmark for both fixed and mobile broadband).

⁹ See Comments of Telecommunications for the Deaf and Hard of Hearing, Inc. et al, GN Docket No. 17-199, at 5-6 (filed September 21, 2017). These commenters recommend adoption for mobile broadband the same 25Mbps/3 Mbps benchmark used for wireline broadband. *Id.* at 6.

Verizon more specifically supports using the availability of 4G LTE as an appropriate measurement. This may be a reasonable approach, particularly if 4G is required, given that 4G LTE is available to more than 99.7% of the country's population, ¹⁰ but only if those interfaces are actually available at the claimed speeds. ¹¹ Verizon advertises 4G LTE download speeds of 5 to 12 Mbps and upload speeds of 2-5 Mbps, "though customers often experience far greater speeds," according to the company. ¹² Adopting an interface-based definition for mobile wireless that in fact results in upload speeds of 2 to 5 Mbps at a minimum would better approximate the capacity necessary for critical functions, such as alarm monitoring.

Finally, ADT is aware that wireless broadband speeds may be more constrained in some rural areas of the country and that the Commission has established the 10 Mbps/1 Mbps metric for supported areas under the Mobility Fund II proceeding. The Commission, however, should aspire to more and decline to find that broadband is being deployed in a timely and reasonable fashion in rural areas based only on a 1 Mbps upstream benchmark. Rural consumers reliant on mobile wireless networks should not be deprived of the use of critical applications, including protections that today's home and alarm monitoring services are capable of providing.

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¹⁰ See Comments of Verizon on the Thirteenth Section 706 Report Notice of Inquiry, GN Docket No. 17-199, at 4 (filed September 21, 2017) ("Verizon Comments").

¹¹ AT&T identifies mean and median LTE download speeds of 23.5 Mbps and 15.5 Mbps, respectively. *See* Opening Comments of AT&T Services, Inc., GN Docket No. 17-199, at 10 (filed September 21, 2017) ("AT&T Comments"). AT&T does not identify an upload speed median nor is possible to ascertain from its comments the degree of variation in speeds, which, as AT&T notes, can vary dramatically. *Id.* at 9-10.

¹² Verizon Comments at 13.

¹³ *NOI* at \P 20.

Conclusion

For the reasons stated above, ADT respectfully urges the Commission to adopt a robust definition of mobile wireless advanced telecommunications capabilities and not settle for a 1 Mbps upstream benchmark.

Respectfully Submitted,

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